The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT L. MARESCA and THOMAS L. AHO

Appeal No. 2000-0261
Application No. 08/677,380

HEARD: March 5, 2002

Before FLEMING, LALL, and SAADAT, Administrative Patent Judges.
LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the Examiner's final rejection[1],[2] of claims 1-6, 9-11, 14, 15, 17, 18 and 22. Claims 7, 12, 13, 16, 19, 23 and 24 have been objected to and claims 25-30 have been indicated as allowed.

The disclosed invention is directed to motion controlling apparatus including a combining network, having an acceleration input for receiving an acceleration signal representative of acceleration of a movable element, from an accelerometer, and a position input for receiving a position signal representative of the position of the movable element, and an output for providing an inferred position signal representative of an inferred position of the movable element. The combining network includes a signal processor for processing the acceleration signal to provide a modified acceleration signal, a second signal processor for processing the position signal to provide a modified position signal, and a combiner for additively combining the modified acceleration signal with the modified position signal to provide the inferred position signal. The first signal processor may comprise a low pass filter, but may include a velocity terminal for providing a velocity signal representative of the velocity of the movable element. There may be a second low pass filter for filtering the position signal to provide the

Further understanding of the invention can be achieved by the following claim.

1. Motion controlling apparatus comprising,

a combining network having an acceleration input for receiving an acceleration signal representative of acceleration of a movable element and a position input for receiving a position signal representative of position of said movable element and an output for providing an inferred position signal representative of an inferred position of said movable element,

said network including a first signal processor for processing said acceleration signal to provide a modified acceleration signal,

a second signal processor for processing said position signal to provide a modified position signal,

a combiner for additively combining said modified acceleration signal with said modified position signal to provide said inferred position signal.

The Examiner relies on the following references:

Ell et al. (Ell)	4,691,152	Sep. 1, 1987
Neal	3,648,031	Mar. 7, 1972

Claim 1 stand rejected under 35 U.S.C. § 102 as being anticipated by Ell.

Claim 1-6, 9-11, 14, 15 and 22 stand rejected under 35 U.S.C. § 102 as being anticipated by Neal.

Rather than repeat the arguments of Appellant and the Examiner, we make reference to the brief and the answer for their respective details thereof.

OPINION

We have considered the rejections advanced by the Examiner and the supporting arguments. We have, likewise, reviewed the Appellants' arguments set forth in the brief.

We affirm-in-part.

We consider the various groups of claims rejected under three different sets of references.

Ell

In response to the rejection of claim 1 under 35 U.S.C. § 102 (final rejection at page 2), Appellants argue, (brief at page 6) that "[t]he current on line 30 [in Ell] is not the acceleration signal representative of the acceleration of a movable element disclosed and claimed in this application." Appellants further argue (id.) that "[t]he reference [Ell] does

for by claim 1." However, we agree with the Examiner (answer at page 6) that current at line 30 indeed is a signal representative of acceleration (figure 2 of Ell) and that node 45 serves as a combining network for the modified acceleration signal (the signal at 30 modified having gone through integrator 31 and network 33) and the measured position signal at line 39 (modified having gone through element 42 in figure 3). Both these signals end up at combining node 45.

A prior art reference anticipates the subject of a claim when the reference discloses every feature of the claimed invention, either explicitly or inherently, See Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997) and RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

In this case, Ell shows every element of claim 1 as required by the anticipatory rejection as discussed above. Therefore, we sustain the anticipation rejection of claim 1 by Ell.

Neal

modified acceleration signal with the modified position signal to provide the inferred position signal, or provide 'the noise-free position and rate output signal." The Examiner responds, answer at page 7, that "[N]eal discloses in figure 2 a position signal that is filtered at element 29, and discloses an acceleration that is filtered at element 37. These signals are further processed by a gain 31 and an adder 34 and these modified signals are provided to the adder 33. Both signals are modified. Both signals are combined." We agree with the Examiner in as far as that the modified position signal and the modified acceleration signal do reach adder 33 and are being combined at 33. However, we cannot determine for sure the output of adder 33 in view of the conflicting disclosure in Neal. Thus, figure 2 itself seems to indicate that the output 36 (Yo) would be an indication of the position of the element being moved. However, Neal at column 3, lines 12 and 13, states, "output [of] adder 33 ... [comprises] the noisefree position and rate output signal ...." (emphasis added). Here, we have to agree with Appellants

that Neal anticipates claim 1. Therefore, we do not sustain the anticipation rejection of claim 1, and also independent claims 9 and 14 since each contains similar recitation. The rejection of the dependent claims 2-6, 10, 11, 15 and 22 is also not sustained.

Neal in view of Ell

Claims 17 and 18 are rejected as being obvious over Neal in view of Ell, see final rejection at page 3. We note that claim 17 has the same recited elements as claim 1 and further claims a movable element and a mover responsive to said control signal for moving said movable element. Since Ell does not cure the deficiency noted above in Neal regarding the recited language of claim 1 which is also found in claim 17, we do not sustain the obviousness rejection of claim 17, and its dependent claim 18 over Neal in view of Ell.

In summary, we have sustained the anticipation rejection of claim 1 by Ell; we have not sustained the anticipation rejection

of claims 1-6, 9-11, 14, 15 and 22 by Neal; and we have not sustained the obviousness rejection of claims 17 and 18 over Neal in view of Ell.

The decision of the Examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

MICHAEL R. FLEMING Administrative Patent Judge	)
PARSHOTAM S. LALL Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
MAHSHID D. SAADAT Administrative Patent Judge	)

Appeal No. 1999-1543
Application No. 08/456,762

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